

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 9-14 are pending active examination. Claims 1-8 are withdrawn from consideration as being drawn to non-elected inventions. Claims 9 and 13 are amended to provide a clearer presentation of the claimed subject matter. Applicant submits that no new matter has been added. Claims 11, 15, and 16 are cancelled without prejudice or disclaimer. No new claims have been added.

In the outstanding Office Action, the Examiner has rejected Claims 9-14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,440,858 to Canale et al. (hereinafter Canale et al.) in view of WO 02/23609 to Mimura et al.¹ (hereinafter Mimura et al.).

Applicant traverses this rejection for at least the following reasons.

Applicant submits that the cited portions of Canale et al. fail to disclose, teach, or suggest a reactive process gas comprising a fluorine-containing gas, *wherein the fluorine-containing gas comprises at least two of NF₃, SiF₄, and SF₆*. Applicant also submits that the cited portions of Mimura et al. fail to disclose, teach, or suggest a reactive process gas comprising HBr, O₂, and a fluorine-containing gas, *wherein the fluorine-containing gas comprises at least two of NF₃, SiF₄, and SF₆*. Furthermore, Applicant submits that the cited portions of Canale et al. and Mimura et al. fail to disclose, teach, or suggest a plasma processing system for etching a silicon-comprising substrate, comprising *inter alia* a controller coupled to said processing chamber, said means for introducing a reactive process gas and said means for introducing a Noble gas, wherein said controller is configured to: introduce said reactive process into said processing space; and introduce said Noble gas into said processing space such that, during etching, a flow rate of said HBr is replaced with a flow rate of said Noble gas by an amount up to and including 80%.

For example, the cited portions of Canale et al. and Mimura et al. make no mention or suggestion of a controller configured to: introduce said reactive process into said processing

¹ For purposes of discussing Mimura et al., the Applicant refers to U.S. Patent No. 7,022,616, which corresponds to the publication, in Japanese, of Mimura et al. upon which the Examiner relies to reject the claims. Accordingly, where reference is made to Mimura et al., the reference is to the U.S. Publication of the corresponding U.S. Patent.

chamber; and introduce said Noble gas into said processing space such that, during etching, a flow rate of said HBr is replaced with a flow rate of said Noble gas by an amount up to and including 80%.

Accordingly, Applicant submits that the cited portions of Canale et al. and Mimura et al. fail to disclose, teach, or suggest, each and every feature of claim 9. Claims 10, and 12-14 depend respectively from claim 9, and are, therefore, patentable for at least the same reasons provided above related to claim 9, and for the additional features recited therein. Claim 11 has been canceled, and thus, its rejection is moot. Therefore, Applicant respectfully requests that the rejection of claims 9-14 under 35 U.S.C. §103(a) over Canale et al. in view of Mimura et al. should be withdrawn and the claims be allowed.

CONCLUSIONS

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Should the Examiner have any questions or deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Charge Deposit Account

Please charge our Deposit Account No. 50-3451 for any additional fee(s) that may be due in this matter, and please credit the same deposit account for any overpayment.

Respectfully submitted,

/Eric Strang/

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